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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,060	06/29/2005	Meindert Willem Brieko	OCT-0018-US	6067

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EXAMINER

TAI, XIUYU

ART UNIT	PAPER NUMBER
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4151

MAIL DATE	DELIVERY MODE
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03/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/541,060	Applicant(s) BRIEKO, MEINDERT WILLEM	
	Examiner Xiuyu Tai	Art Unit 4151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/29/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

Claim Objections

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims

are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Claims 11 and 12 as in original claim should be preserved and indicated by claim identifier as "cancelled" in parentheses

Claims 1-5 and 10 in the currently amended claim are not the same as the original claims. They should be indicated by claim identifier as "currently amended" in parentheses.

In claim 7, word "iron" should apparently be inserted between "comprising" and "(Fe)".

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 4 recites the limitation "the first edge zone" and "the second edge zone".

There is insufficient antecedent basis for this limitation in the claim.

5. Claim 5 recites the limitation "the second edge zone". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 9, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Barker (U.S. 5,009,243).

8. Regarding claim 1, Barker discloses a solar harness apparatus. The apparatus comprises at least one magnetic pressing element (reference 51 in Figure 3; col. 6, line 2; claim 1 (b)) for positioning electrical contact means (reference 55 and 57 in Figure 3; con. 5, line 20) , and in electrical contact with, at least a part of respectively the first and second cell (reference 41 and 43 in Figure 4; col. 6, line 14-18), characterized in that the contact means comprise an electrically conductive layer (reference 55 and 57 in Figure 3; con. 5, line 20) on respective co-acting edge zones of the first and second cell for bringing the first and the second cell in to electrical contact in overlapping state of these edge zones. Barker teaches that the conductive material 55 & 57 can be in the form of conductive coating (col. 4, line 2-7). It should be noted that solar cells 41 & 43 and conductive material wrappings 55 & 57 on magnets of Barker are arranged in a stacking fashion so as that the cells are electrically contacted each other and overlapped via the conductive material wrappings and magnets (col. 6, line 14-22).

8. Regarding claim 2, a plurality of magnets is located between each adjacent solar cell (col. 6, line 14-18; claim 1(b)), reads on "it comprises two co-acting permanent magnetic pressing elements (7) for receiving there between in mutual electrical contact at least a part of the first (1) and second cell (2, 3)" as claimed.

9. Regarding claim 9, the apparatus of Barker also comprises a rod 59 (Figure 4; col. 6, line 17-18) that passes through orifices 53 (Figure 3; col. 6, line 7-8) in magnets

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and the cutout 47 of cell (col. 5, line 63-64), which reads on "it is provided with locking means (8) for locking two cells (1, 2, 3) coupled to the coupling device against displacement in the direction of the plane of these cells" as claimed.

10. Regarding claim 10, Barker indicates that the rod 59 may be made of nonconductive or insulated material (col. 6, line 8-9), which reads on "the locking means comprise a locking pin (8) of an insulating material extending through co-acting openings formed in the at least one pressing element (7) and the first (1) and second cell (2, 3)" as claimed.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. Claims 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barker (U.S. 5,009,243) in view of Denes (U.S. 3,502,584)

14. Regarding claim 3, since solar cells 41 & 43 and magnets 51 & 61 of Barker are arranged in a stacking fashion, the cells are contacted with magnets and overlapped via the conductive material wrappings and magnets (Figure 4; col. 6, line 14-22). The reference of Barker is silent about the specific material used in the magnet. However, Denes teaches that a magnet contains a permanent magnetic material and/ or a ferromagnetic material (col.6, line 20-31 & col. 5, line 13-14).). Therefore, it would be obvious for one having ordinary skill in the art to utilize a magnet containing a permanent and/or a ferromagnetic material magnetic material as suggested by Denes in order to achieve strong magnetic power to hold the cells of Barker in place. In addition, although the reference of Barker is silent with respect to the configuration of magnet in the form of a layer and/or a foil, one having ordinary skill in the art would have found obvious to utilize a layer and/or a foil of magnet material in order for solar cells to occupy less space, hence relatively compact. Furthermore, the instant specification does not provide the criticality regarding the types and configurations of magnet to operate the apparatus.

15. Regarding claim 7, Denes further teaches examples of ferromagnetic material include iron, iron-nickel alloys, iron-cobalt alloys (col. 3, line 15-17).

16. Regarding claim 8, Barker suggests that the conductive material wrapping 55 and 57 are copper foils or gold (col. 6, line 4-7), reads on “the electrically conducting layer contains gold (Au)” as claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuyu Tai whose telephone number is 571-270-1855. The examiner can normally be reached on Monday - Friday, 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mikhail Kornakov can be reached on 571-272-1303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Xiuyu Tai

3/11/2008

/Michael Kornakov/

Supervisory Patent Examiner, Art Unit 4151